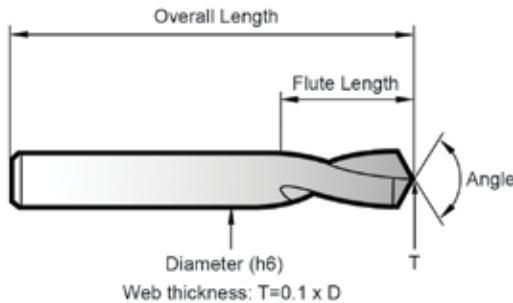




## CNC Spot Drills

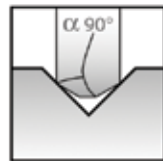
### Micrograin Solid Carbide

Stub Length

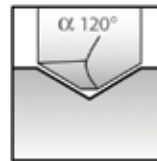


**Hard'X:** AlTiN carbide tool coating with a high hardness of 3500 HV. This coating shows high thermic stability and excellent protection against heat and wear. Ideal for dry machining - high speed cut - in treated steels and dies up to 67 HRC.

Diameters	Tolerance D	Angle	L
0.078-0.118	0 + 0.0002"	±1°	±0.0395
1/8-0.236	0 + 0.0003"	±1°	±0.0395
1/4-0.394	0 + 0.0004"	±1°	±0.0395
0.472-1	0 + 0.0005"	±1°	±0.0395



**90 degree angle:**  
By using the Magafor NC drill of diameter over the drilling tool, centering and chamfering are obtained in a single operation



**120 degree angle:**  
The preliminary hole obtained with the Magafor NC drill corresponds to the angle at the end of the tool used in drilling and prevents it from deviating

### 90° Angle (Series 8195), Hard'X 90° Angle (Series 8195-H) & 120° Angle (Series 8196)

Diameter Inch (mm)	Overall Length (Inch)	Flute Length (Inch)	Web Thickness of Split Point (Inch)	90° Angle (Series 8195)	90° Angle (Series 8195-H)	120° Angle (Series 8196)
				Code	Hard'X Code	Code
0.078 (2)	1-9/16	0.315	0.008	540050	314267	540070
0.118 (3)	1-3/4	0.4	0.012	540051	314270	540071
0.157 (4)	2	0.475	0.016	540052	314273	540072
0.197 (5)	2	0.6	0.02	540053	314276	540073
0.236 (6)	2	0.7	0.023	540054	314279	540074
1/4 (6.35)	2	0.7	0.023	540055	314282	540075
5/16 (7.93)	2-3/8	0.9	0.031	314264	314285	-
0.315 (8)	2-3/8	0.9	0.031	540056	314288	540076
3/8 (9.52)	2-3/4	0.95	0.039	540057	314291	540077
0.394 (10)	2-3/4	0.95	0.039	540058	314294	540078
0.472 (12)	2-3/4	0.95	0.047	540059	314297	540079
1/2 (12.70)	2-3/4	0.95	0.051	540060	314300	540080
0.551 (14)	3	0.95	0.055	540061	314303	540081
5/8 (15.87)	3-1/8	1	0.063	540062	314306	540082
0.63 (16)	3-1/8	1	0.063	540063	314309	540083
0.787 (20)	4	1-3/8	0.079	540064	314312	540084

### Long Length – 90° Angle (Series 8197)



Diameter Inch (mm)	Overall Length (Inch)	Flute Length (Inch)	Web Thickness of Split Point (Inch)	90° Angle (Series 8197)	Diameter Inch (mm)	Overall Length (Inch)	Flute Length (Inch)	Web Thickness of Split Point (Inch)	90° Angle (Series 8197)
				Code					Code
0.157 (4)	4	0.475	0.016	314318	0.394 (10)	6-3/4	1	0.039	314336
0.197 (5)	4-3/4	0.6	0.02	314321	0.472 (12)	6-3/4	1-3/16	0.047	314339
0.236 (6)	5-1/2	0.8	0.023	314324	1/2 (12.70)	6-3/4	1-3/8	0.051	314342
1/4 (6.35)	5-1/2	0.87	0.025	314327	5/8 (15.87)	8	1-3/8	0.063	314345
0.315 (8)	5-1/2	1	0.031	314330	0.63 (16)	8	1-3/8	0.063	314348
3/8 (9.52)	6-3/4	1	0.039	314333	3/4 (19.05)	8	1-5/8	0.075	314351
					0.787 (20)	8	1-5/8	0.079	314354